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Remarks

Reconsideration and allowance of the above-referenced application are respectfully requested.

After reconsidering the issues, applicants have decided to present new claims which are more clearly patentable, thereby removing the current case from appeal. An RCE is concurrently filed. Please dismiss the current appeal in favor of these new claims and RCE. Since these new claims are much more clearly patentable then the previous claims, reconsideration and allowance of these new claims are requested.

Claim 1 has been amended to include the subject matter from page 13, first full paragraph, which states that the present system enables reducing Barkhausen noise to bring the integrated RMS noise below 2.1 nm of positional inaccuracy. Nowhere does the cited prior art to Neff in any way teach or suggest bringing the RMS noise below 2.1 nm, and therefore claim 1 is patentable over this reference along with the claims that depend therefrom.

The subject matter of each of these dependent claims should be allowable on its own merits.

Claim 61 specifies that the coil forms are made of nonferro magnetic material. While the second embodiment of Neff teaches using an air core instead of an iron core, he teaches nothing about the coil form itself, rather, he only discusses

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the CORE. Therefore, Neff does not anticipate or render obvious using a non-ferro magnetic material for the coil form. Neff in fact it is quite simply silent on what the coil form is.

Claim 67 defines "means for reducing Barkhausen noise".

Nothing in Neff teaches anything about Barkhausen noise, much less reducing it.

Finally, claim 69 defines a method of operation such as a transducer including reducing the output signal to a resolution less than 2.1 nm. None of this is in any way taught or suggested by the cited prior art.

It is believed that all of the pending claims have been addressed in this paper. However, failure to address a specific rejection, issue or comment, does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above are not intended to be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

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In view of the above amendments and remarks, therefore, all of the claims should be in condition for allowance. A formal notice to that effect is respectfully solicited.

Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: October 28, 2004

Reg. No. 32,030

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